

*Fig 1 ( 1 )*

1 tacaatgggg tggcggaggt gaagaaacgg ggttacttct atgctagaac gcaaggaaca 19ftf>  
y n g v a e v k k r g y f y a r t  
y n g v a e v n t e r q a n g q i

61 taaaaaaaatg tataaaagcg gtaaaaattg ggcagtgcgtt acactctcga ctgctgcgtc  
1 m y k s g k n w a v v t l s t a a

121 ggtatgggt gcaacaactg taaatgcac tcgacgacaca aatattgaaa acaatgattc  
18 l v f g a t t v n a s a d t n i e n n d

181 ttctactgta caagttacaa caggtgataa tgatattgct gttaaaagtg tgacacttgg  
38 s s t v q v t t g d n d i a v k s v t l

241 tagtgtcaa gtttagtgcag ctgtgatac gactattaga acttctgcta atgcaaata  
58 g s g q v s a a s d t t i r t s a n a n

301 tgcttcttc gcccctaata cacaaaattc taacagtcaa gtagcaagtt ctgctgcaat  
78 s a s s a a n t q n s n s q v a s s a a

361 aacatcatct acaagttccg cagttcatt aaataacaca gatagtaaag cggtcaaga  
98 i t s s t s s a a s l n n t d s k a a q

421 aaataactaat acagccaaaa atgatgacac gcaaaaagct gcaccagctc acgaatctc  
118 e n t n t a k n d d t q k a a p a n e s

481 tgaagctaaa aatgaaccag ctgtaaacgt taatgattct tcagctgcaa aaaatgatga  
138 s e a k n e p a v n v n d s s a a k n d

541 tcaacaatcc agtaaaaaga atactaccgc taagttAAC aaggatgctg aaaacgttgt  
158 d q q s s k k n t t a k l n k d a e n v

601 aaaaaaggcg ggaattgatc ctaacagttt aactgatgac cagattaaag cattaaataa  
178 v k k a g i d p n s l t d d q i k a l n

*Fig 1 ( 2 )*

661 gatgaacttc tcgaaagctg caaagtctgg tacacaaaatg acttataatg atttccaaaa  
 198 k m n f s k a a k s g t q m t y n d f q

721 gattgctgat acgttaatca aacaagatgg tcggtacaca gttccattct ttAAAGCAAG 20ftfi <  
 218 k i a d t l i k q d g r y t v p f f k a

781 tgaaatcaaa aatatgcctg ccgctacaac taaagatgca caaactaata ctattgaacc  
 238 s e i k n m p a a t t k d a q t n t i e

841 ttttagatgta tgggattcat ggccagttca agatgtcgg acaggacaag ttgctaattg 5ftf >  
 258 p l d v w d s w p v q d v r t g q v a n 8ftfi <

901 gaatggctat caacttgtca tcgcaatgat ggaaattcca aaccaaaaatg ataatcatat  
 278 w n g y q l v i a m m g i p n q n d n h

961 ctatctctta tataataagt atggtgataa tgaattaagt cattggaa atgttaggtcc 7ftf >  
 298 i y l l y n k y g d n e l s h w k n v g

1021 aattttggc tataattcta ccgcggttc acaagaatgg tcaggatcag ctgtttgaa 7ftf >  
 318 p i f g y n s t a v s q e w s g s a v l 6ftfi <

1081 cagtgataac tctatccaat tattttatac aaggtagac acgtctgata acaataccaa  
 338 n s d n s i q l f y t r v d t s d n n t

1141 tcataaaaa attgctagcg ctactctta ttAAACTGAT aataatggaa atgtatcact NheI  
 358 n h q k i a s a t l y l t d n n g n v s AC1(i)<>

1201 cgctcaggta cgaaatgact atattgtatt tgaaggtgat ggcttattact accaaactta AC2(i)<>  
 378 l a q v r n d y i v f e g d g y y y q t

1261 tgatcaatgg aaagctacta acaaagggtgc cgataatatt gcaatgcgtg atgctcatgt  
 398 y d q w k a t n k g a d n i a m r d a h

*Fig 1 ( 3 )*

1321 aattgaagat ggtaatggtg atcggtacct tgttttgaa gcaagtactg gtttgaaaa  
 418 v i e d g n g d r y l v f e a s t g l e

1381 ttatcaaggc gaggacaaa ttataactg gttaaattat ggcggagatg acgcattaa  
 438 n y q g e d q i y n w l n y g g d d a f

1441 tatcaagac ttatttagaa ttctttccaa tcatgtatatt aagagtcggg caacttggc  
 458 n i k s l f r i l s n d d i k s r a t w

1501 taatgcagct atcggtatcc tcaaactaaa taaggacgaa aagaatccta aggtggcaga  
 478 a n a a i g i l k l n k d e k n p k v a

1561 gttatactca ccattaattt ctgcaccaat ggtaagcgat gaaattgagc gaccaaatgt  
 498 e l y s p l i s a p m v s d e i e r p n

1621 agttaaatta ggtaataaaat attacttatt tgccgctacc cgtttaaattc gaggaagtaa  
 518 v v k l g n k y y l f a a t r l n r g s

1681 tcatgtatgtct tggatgaatg ctaattatgc cggtggatg aatgttgcaa tggtcggata  
 538 n d d a w m n a n y a v g d n v a m v g

1741 tggatgtatgtatgtactg gatcttataa gccattaaat gattctggag tagtcttgac  
 558 y v a d s l t g s y k p l n d s g v v l

1801 tgcttctgtt cctgcaaact ggccggacagc aacttattca tattatgtc tccccgttgc  
 578 t a s v p a n w r t a t y s y y a v p v

1861 cgaaaaagat gaccaagtat tagttacttc atatatgact aatagaaatg gagtagcggg  
 598 a g k d d q v l v t s y m t n r n g v a

1921 taaaggaatg gattcaactt gggcacggag tttcttacta caaattaacc cgataaacac 12ftfi <  
 618 g k g m d s t w a p s f l l q i n p d n

*Fig 1 ( 4 )*

1981 aactactgtt ttagctaaaa tgactaatca aggggattgg atttggatg attcaagcga  
 638 t t t v l a k m t n q g d w i w d d s s

2041 aaatcttgat atgattggtg attagactc cgctgctta cctggcgaac gtgataaacc  
 658 e n l d m i g d l d s a a l p g e r d k

2101 tttgattgg gacttaattg gttatggatt aaaaccgcat gatcctgcta caccaaatga  
 678 p v d w d l i g y g l k p h d p a t p n

2161 tcctgaaacg ccaactacac cagaaacccc tgagacacct aatactccca aaacaccaa  
 698 d p e t p t t p e t p e t p n t p k t p

2221 gactcctgaa aatcctggta cacctcaaac tcctaataca cctaatactc cgaaattcc  
 718 k t p e n p g t p q t p n t p n t p e i

2281 tttaactcca gaaacgccta agcaacctga aacccaaact aataatcggt tgccacaaac  
 738 p l t p e t p k q p e t q t n n r l p q

2341 tggaaataat gccaataaag ccatgattgg cctaggatg ggaacattgc ttagtatgtt  
 758 t g n n a n k a m i g l g m g t l l s m

2401 tggcttgca gaaattaaca aacgtcgatt taactaaata cttaaaata aaaccgctaa  
 778 f g l a e i n k r r f n -

2461 gccttaatt cagcttaacg gtttttatt ttaaaagttt ttattgtaaa aaagcgaatt

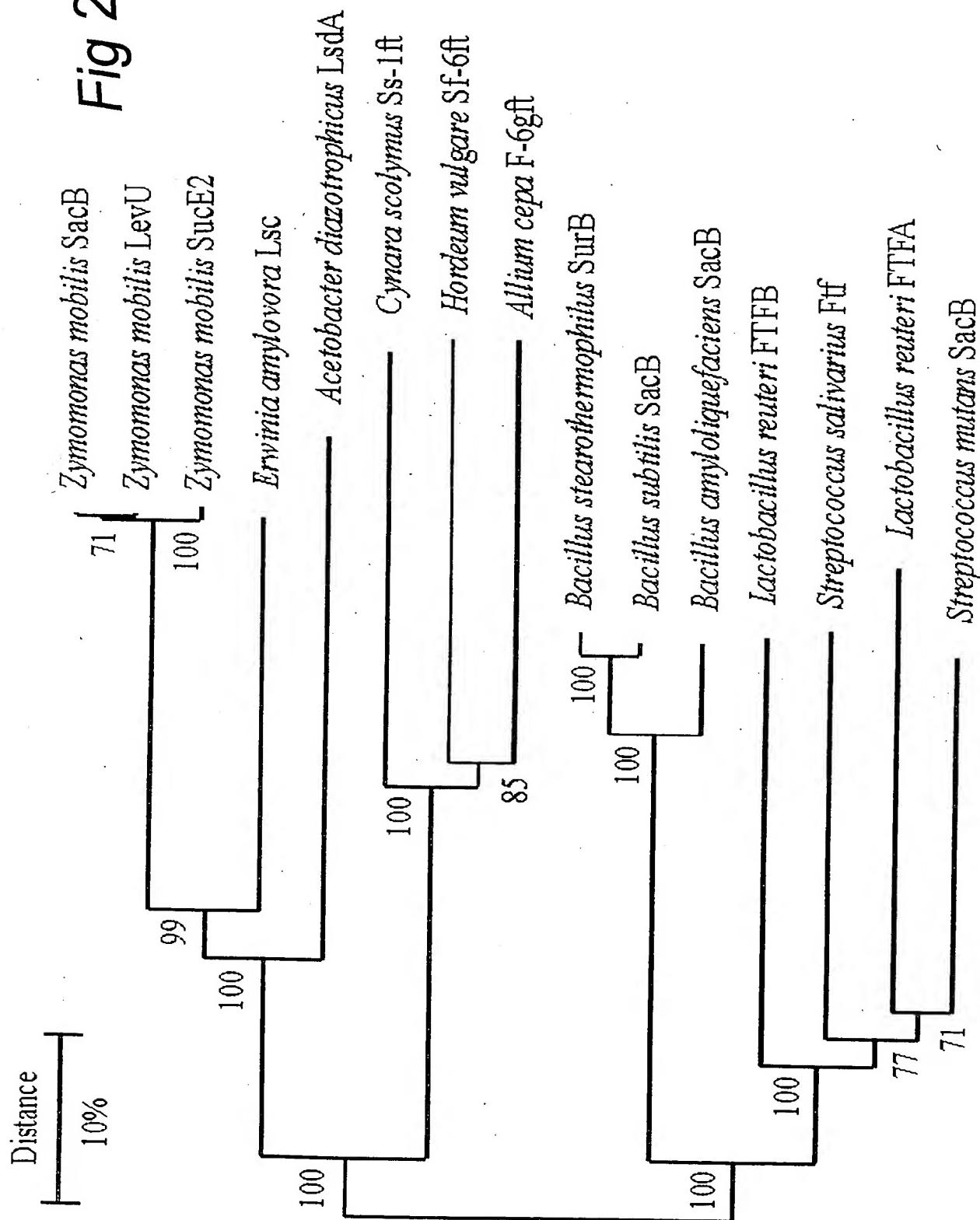
2521 atcattaata ctaatgcaat tggtaaga cttacgaca gtagtaacaa tgaatttgcc

2581 catcttgtc gg

*NheI*

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Fig 2



### *Fig 3*

The N-terminal sequence of FTFB (levansucrase):

(A) Q V E S N N Y N G V A E V N T E R Q A N G Q I (G) (V) (D).

Internal peptide sequences of FTFB (levansucrase):

- (M) (A) H L D V W D S W P V Q D P (V),
- N A G S I F G T (K),
- V (E) (E) V Y S P K V S T L M A S D E V E.

*Fig 4*

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5ftf			
<i>B. amylolyquefaciens</i> SacB	80	GILDVWDSWPQLQNAD	93
<i>B. subtilis</i> SacB	82	GILDVWDSWPQLQNAD	95
<i>S. mutans</i> SacB	243	DIDDVWDSWPVQDAK	256
<i>S. salivarius</i> Ff	282	EIDVVWDSWPVQDAK	295
		: * * * * * : * : * .	
6ftfi			
<i>B. amylolyquefaciens</i> SacB	156	QTQEWSSGATFTSDGK	171
<i>B. subtilis</i> SacB	158	QTQEWSSGATFTSDGK	173
<i>S. mutans</i> SacB	312	L T Q E W S G A T V N E D G S	327
<i>S. salivarius</i> Ff	351	D D Q Q W S G A T V N S D G S * : * * * * * . . . . * .	366
12ftfi			
<i>B. amylolyquefaciens</i> SacB	440	K A T F G P S F L M N	450
<i>B. subtilis</i> SacB	440	Q S T F A P S F L I N	450
<i>S. mutans</i> SacB	609	N S T W A P S F L I Q	619
<i>S. salivarius</i> Ff	655	K S T W A P S F L I K : : * : . * * * * : :	665

*Fig 5*

